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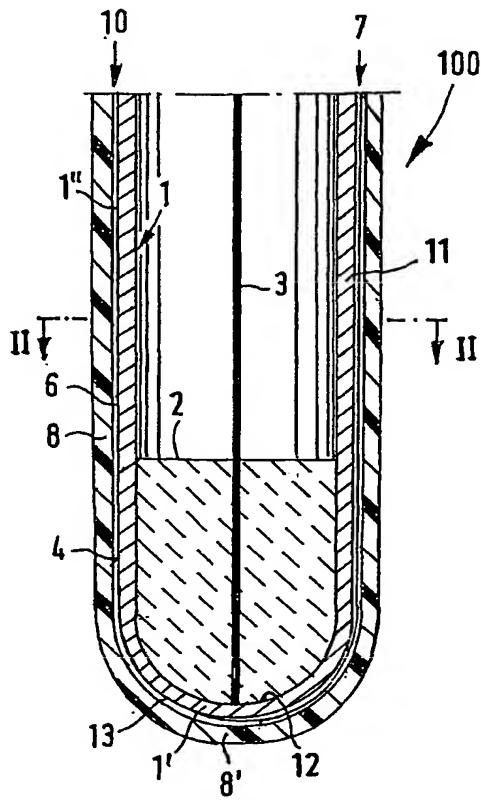
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*[Continued on next page]*

(54) Title: PROBE FOR DETERMINATION OF OXYGEN ACTIVITY IN METAL MELTS AND METHODS FOR ITS PRODUCTION



(57) Abstract: The invention relates to a probe (100, 200, .300, 400, 500, 600) for the measurement of the oxygen activity of metal melts, in particular steel melts, comprising a reference substance (2) of known oxygen activity in electrically conducting contact (3) with a measuring device; and comprising a solid electrolyte predominantly oxygen ion conducting and negligibly electron conducting at high temperatures and separating the reference substance (2) from the metal melt and having an entry surface (4) for oxygen ions which is in contact with the metal melt, wherein the entry surface (4) of the probe ready for operation is covered by a functional foil arrangement (10,20) in close contact to the entry surface (4).



European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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## INTERNATIONAL SEARCH REPORT

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## A. CLASSIFICATION OF SUBJECT MATTER

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According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	GB 1 594 223 A (NAT RES DEV) 30 July 1981 (1981-07-30)	1-3, 7-11
A	page 1-2; figure 1 ---	4-6
Y	DATABASE WPI Section Ch, Week 198139 Derwent Publications Ltd., London, GB; Class J04, AN 1981-70709D XP002271695 -& JP 56 100353 A (HITACHI CHEM CO LTD), 12 August 1981 (1981-08-12)	1-3, 7-11
A	abstract; figures 1-3 ---	4-6 -/-

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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## INTERNATIONAL SEARCH REPORT

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